

**DECISION
AND
FINDING OF NO SIGNIFICANT IMPACT**

**ENVIRONMENTAL ASSESSMENT: MANAGEMENT OF BEAVER DAMAGE WITHIN
THE STATE OF MAINE**

**United States Department of Agriculture
Animal and Plant Health Inspection Service
Wildlife Services**

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I. INTRODUCTION

The United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Wildlife Services (WS) program prepared an environmental assessment (EA) to evaluate potential impacts to the quality of the human environment from the implementation of a management program to address damage to property, agricultural resources, natural resources, and threats to human safety caused by beaver (*Castor canadensis*) in Maine (USDA 2001)¹. The EA evaluated the need for damage management and the relative effectiveness of six alternatives to meet that proposed need, while accounting for the potential environmental effects of those activities. WS' proposed action in the EA evaluates an integrated damage management program in Maine to fully address the need for resolving damage caused by beaver while minimizing impacts to the human environment.

II. PUBLIC INVOLVEMENT

Issues related to beaver damage management in Maine and the proposed action were initially developed by WS, the Maine Department of Inland Fisheries and Wildlife (MDIFW), the Maine Department of Agriculture, the Maine Department of Forestry, the Maine Department of Environmental Protection, and the United States Army Corps of Engineers. As part of the scoping process during the development of the EA, an invitation letter requesting participation and comment from interested parties on the preliminary issues, objectives, preliminary alternatives, and the need for action identified by the multi-agency team was developed. The letter was mailed to five individuals or organizations identified as interested in beaver damage management activities in Maine. A legal notice was also published in the *Bangor Daily News* requesting public comment on the proposed action prior to the development of the EA during a 30-day comment period. During the initial public participation period prior to the development of the EA, four comment letters were received. After review of the public comments received and continued collaboration with the multi-agency team, a pre-decisional EA² was developed based on the issues and alternatives identified through the multi-agency team and public comments.

The pre-decisional EA was made available to the public for review and comment during a 30-day public comment period by a legal notice published in the *Bangor Daily News*. A letter of availability for the pre-decisional EA was also mailed directly to agencies, organizations, and individuals that provided comments

¹ Copies of the EA and the associated Decision/Finding of No Significant Impact (FONSI) are available for review by sending a request to State Director, USDA/APHIS/WS 79 Leighton Road, Suite 12, Augusta, Maine 04952 or from the APHIS website at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml.

² Before a Decision for the EA is issued, the EA is considered pre-decisional. After the development of the EA by WS and consulting agencies and after public involvement in identifying new issues and alternatives, WS issues a Decision. Based on the analysis in the EA after public involvement, a decision is made to either publish a Notice of Intent to prepare an Environmental Impact Statement or a Finding of No Significant Impact will be noticed to the public in accordance to the NEPA, the Council of Environmental Quality regulations, and APHIS' NEPA implementation regulations.

during the initial public involvement period. At the request of Tribal representatives in Maine, the comment period was extended an additional 30 days. Three comment letters were received during the extended comment period. All comments were analyzed to identify substantial new issues and alternatives which were considered in developing the Decision for the EA. After consideration of the analysis contained in the EA and review of public comments, a Decision and Finding of No Significant Impact (FONSI) for the EA was issued on March 28, 2001. The Decision and FONSI selected the proposed action which implemented an integrated damage management program in Maine using multiple methods to adequately address the need to manage damage caused by beaver.

This summary report and new Decision along with the EA and the 2001 Decision/FONSI will be made available for public review and comment through the publication of a legal notice announcing a minimum of a 30-day comment period. The legal notice will be published in the *Kennebec Journal* and posted on the APHIS website located at http://www.aphis.usda.gov/wildlife_damage/nepa.shtml according to WS' public notification requirements (72 FR 13237). This new Decision will also be directly mailed to agencies, organizations, and individuals with probable interest in the proposed program. Comments received during the public involvement process will be fully considered for new substantive issues and alternatives. Unless new substantive issues and/or new alternatives are brought to WS' attention, this new Decision will take effect upon the close of the comment period.

III. PURPOSE

This new Decision and summary report will analyze WS' beaver damage management activities in Maine since the 2001 Decision/FONSI was signed for the EA to: 1) facilitate planning and interagency coordination, 2) streamline program management, 3) ensure WS' activities remain within the scope of analyses contained in the EA, and 4) clearly communicate to the public the analysis of individual and cumulative impacts of the proposed action since 2001. This new Decision/FONSI ensures WS' actions comply with NEPA, with the Council on Environmental Quality (40 CFR 1500), and with APHIS' NEPA implementing regulations (7 CFR 372). All damage management activities, including disposal requirements, are conducted by WS consistent with: 1) the Endangered Species Act of 1973, 2) the Clean Water Act, 3) Executive Order (EO) 12898³, 4) EO 13045⁴, and 5) federal, state, and local laws, regulations, and policies.

IV. MONITORING

The WS program in Maine annually reviews program activities to determine impacts on issues identified and to ensure that program activities are within the scope of analysis contained in the EA. The annual monitoring reports document WS' activities while discussing any new information that becomes available since the completion of the EA and the last monitoring report. If WS' activities, as identified in the annual monitoring reports, are outside the scope of the analyses in the EA or if new issues are identified from available information, further analysis would occur and the EA would be supplemented to the degree as identified by those processes pursuant to NEPA or a notice of intent to prepare an Environmental Impact Statement (EIS) would occur.

This summary report and new Decision will evaluate WS' activities to resolve and prevent damage caused by beaver in Maine under the proposed action described in the EA since the 2001 Decision and FONSI were signed. WS will continue to coordinate activities to alleviate or prevent beaver damage with the

³Executive Order 12898 promotes the fair treatment of people of all races, income levels, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

⁴Executive Order 13045 ensures the protection of children from environmental health and safety risks since children may suffer disproportionately from those risks.

MDIFW to ensure WS' activities are considered as part of the management objectives for beaver.

V. RELATIONSHIP OF THIS DOCUMENT TO OTHER ENVIRONMENTAL DOCUMENTS

WS' Programmatic Environmental Impact Statement: WS has developed a programmatic Final Environmental Impact Statement (FEIS) that addresses the need for wildlife damage management in the United States (USDA 1997)⁵. The FEIS contains detailed discussions of potential impacts to the human environment from wildlife damage management methods used by WS. Information from WS' programmatic FEIS has been incorporated by reference into the EA along with this summary report and new Decision.

VI. AFFECTED ENVIRONMENT

Upon receiving a request for assistance, beaver damage management can be conducted on private, federal, state, tribal, county, and municipal lands in Maine to protect agricultural and natural resources, property, roads, bridges, railroads, and to reduce threats to public safety. Areas of the proposed action could include state and interstate highways and roads, and railroads and their right-of-ways where beaver activities cause damage. Areas may also include property in or adjacent to subdivisions, businesses, and industrial parks where beaver impound water and gnaw on or fell trees. Additionally, affected areas could include timberlands, croplands, and pastures that experience financial losses from beaver flooding or gnawing. The proposed action also could include private and public property where beaver causes damage to dikes, ditches, ponds and levees, and where feeding causes agricultural crop losses and negatively impacts wildlife, including threatened and endangered (T&E) species.

WS reviewed the affected environment during evaluations of programs activities under the proposed action through annual monitoring reports and this summary report. The affected environment has not changed since the implementation of the proposed action and continues to be as addressed in the EA.

VII. COMPLIANCE

WS' activities to reduce damage and threats associated with beaver are regulated by federal, state, and local laws and regulations. WS compliance with relevant laws and regulations are discussed in the EA (USDA 2001). WS' activities are also conducted consistent with relevant Executive Orders which were also discussed in the EA (USDA 2001). Compliance with laws, regulations, and Executive Orders not directly addressed in the EA will be discussed in this summary report.

Endangered Species Act of 1973

It is federal policy, under the Endangered Species Act (ESA), that all federal agencies shall seek to conserve endangered and threatened species and shall utilize their authorities in furtherance of the purposes of the Act (Sec. 2(c)). WS conducts Section 7 consultations with the USFWS to use the expertise of the USFWS to ensure that "*any action authorized, funded or carried out by such an agency... is not likely to jeopardize the continued existence of any endangered or threatened species . . . each agency shall use the best scientific and commercial data available*" (Sec. 7(a)(2)). WS obtained a Biological Opinion from the USFWS describing potential effects on T&E species and prescribing reasonable and prudent measures for avoiding jeopardy on WS' programmatic activities (USDA 1997). The WS program in Maine has also consulted with the USFWS to meet requirements of the ESA.

⁵Copies of WS' programmatic FEIS are available from USDA/APHIS/WS-Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD 20737-1234.

Coastal Zone Management Act of 1972, as amended (16 USC 1451-1464, Chapter 33; P.L. 92-583, October 27, 1972; 86 Stat. 1280).

This law established a voluntary national program within the Department of Commerce to encourage coastal states to develop and implement coastal zone management plans. Funds were authorized for cost-sharing grants to states to develop their programs. Subsequent to federal approval of their plans, grants would be awarded for implementation purposes. In order to be eligible for federal approval, each state's plan was required to define boundaries of the coastal zone, identify uses of the area to be regulated by the state, determine the mechanism (criteria, standards or regulations) for controlling such uses, and develop broad guidelines for priorities of uses within the coastal zone. In addition, this law established a system of criteria and standards for requiring that federal actions be conducted in a manner consistent with the federally approved plan. The standard for determining consistency varied depending on whether the federal action involved a permit, license, financial assistance, or a federally authorized activity. As appropriate, a consistency determination would be conducted by WS to assure management actions would be consistent with the State's Coastal Zone Management Program.

The Native American Graves and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act requires federal agencies to notify the Secretary of the Department that manages the federal lands upon the discovery of Native American cultural items on federal or tribal lands. Federal projects would discontinue work until a reasonable effort has been made to protect the items and the proper authority has been notified.

Executive Order 13045: Protection of Children from Environmental Health and Safety Risks

Children may suffer disproportionately from environmental health and safety risks for many reasons, including their development physical and mental status. Because WS makes it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children, WS has considered the impacts that this proposal might have on children. The proposed program would only occur by using legally available and approved methods where it is highly unlikely that children would be adversely affected. For these reasons, WS concludes that it would not create an environmental health or safety risk to children from implementing this proposed action.

VIII. WS' ACTIVITIES TO MANAGE DAMAGE CAUSED BY BEAVER

WS continued to assist those cooperators requesting assistance with damage caused by beaver in Maine from federal fiscal year (FY)⁶ 2001 through FY 2008. Those requesting assistance reported damages to roads, timber, drainage control devices, and public drinking supplies, primarily caused by beaver impounding water through dam building.

WS provided both technical assistance and direct management activities as described in the EA from FY 2001 through FY 2008. Technical assistance provides those interested with information and recommendations on preventing wildlife damage and effective methods for resolving damage which are legally available for use. This information can then be employed by those persons experiencing wildlife damage to effectively resolve damage without WS' direct involvement.

Operational assistance occurs when WS is directly involved with employing methods to resolve, alleviate,

⁶The federal fiscal year begins on October 1 and ends on September 30 the following year.

or reduce damage and threats associated with beaver. As directed by the selected alternative, WS applies multiple methods as part of an integrated damage management program to resolve requests for assistance. WS' technical assistance and direct operational programs are discussed in detail in the EA (USDA 2001) along with WS' programmatic FEIS (USDA 1997). WS' activities from FY 2001 through FY 2008 are summarized below:

Summary of WS' Beaver Damage Management Activities in Maine during FY 2001

WS continued to implement the proposed action in FY 2001 through the integration of technical and operational assistance to those requesting assistance with beaver damage in Maine. Damage reported and verified by WS in FY 2001 occurred primarily from beaver dams impounding water that flooded roads. WS provided direct assistance to requestors through the direct application of methods to resolve beaver damage in Maine during FY 2001. WS employed suitcase traps to live-capture and relocated 847 beavers to appropriate habitat identified by the MDIFW in Maine during FY 2001. WS' intentionally lethally removed 45 beaver to alleviate damage in Maine using cage traps and body-gripping (conibear) traps. A total of eight beaver were live captured in cage traps and subsequently euthanized by gunshot and 37 beaver were lethally taken using body-gripping traps. During WS' beaver damage management activities, one raccoon (*Procyon lotor*) was unintentionally live captured in a suitcase trap and released unharmed on site. WS breached 249 beaver dams with hand tools to lower the water level where impounded water was flooding a road and installed 66 pond levelers to maintain the water level.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2002

WS continued to receive requests for assistance in FY 2002 to resolve damage caused by beaver in Maine. Beaver damage occurred primarily to roads and bridges associated with beaver dams impounding water which can cause flooding. WS continued to provide technical assistance by providing information on beaver damage management. In FY 2002, only two requests were received for technical assistance regarding beaver damage management. Direct operational assistance was also provided by WS in FY 2002 to those requesting assistance. WS received 797 calls for assistance to control beaver damage in Maine during FY 2002. WS employed suitcase traps to live-capture and relocated 1,154 beaver in Maine during FY 2002. Beaver were relocated to areas of suitable habitat identified by the MDIFW. WS also employed lethal methods to take 53 beaver in Maine during FY 2002. Body-gripping traps were used to lethally take 44 beaver and nine were live-captured and subsequently euthanized by gunshot. During FY 2002, WS unintentionally captured one fisher (*Martes pennanti*), one great blue heron (*Ardea herodias*), and one dabbling duck (species was not identified) in cage traps which were subsequently released unharmed on site. WS breached 348 beaver dams with hand tools to lower the water level where impounded water was flooding a road and installed 106 pond levelers to maintain the water level.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2003

Both operational assistance and technical assistance were provided to those requesting assistance with resolving damage caused by beaver in Maine during FY 2003. WS received 917 requests for assistance with beaver damage management in the State. Of those requests, 126 requests were for technical assistance. Similar to previous years, damages reported to and verified by WS occurred primarily from the flooding of roads and bridges associated with water impounded by beaver dams. WS continued to address beaver damage in the State using primarily non-lethal methods during FY 2003. WS used cage traps to live-capture 968 beaver in the State with one beaver being live-captured using a cable restraint (snare). Beaver were then relocated to areas suitable habitat identified by the MDIFW. A total of 186 beaver were lethally taken in the State during FY 2003 by WS. WS employed firearms to lethally take four beaver, 78 beaver were taken using body-gripping traps, and 104 beaver were captured in live-traps and were

subsequently euthanized by gunshot. In FY 2003, no unintentional species were captured during WS' direct operational management activities. WS breached 390 beaver dams with hand tools to lower the water level where impounded water was flooding roads and installed 73 pond levelers to maintain water levels.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2004

During FY 2004, WS received 940 requests for assistance to manage beaver damage. Both technical assistance and operational assistance were provided to those requesting assistance with resolving damage caused by beaver in Maine during FY 2004. Damages reported to and verified by WS occurred primarily from beaver flooding roads and bridges. WS conducted 149 technical assistance projects and 590 operational assistance projects involving beaver damage management in FY 2004. Similar to previous years, WS continued to address requests for assistance to manage damage caused by beaver using non-lethal methods. In FY 2004, WS employed suitcase traps to live-capture and relocate 667 beaver in the State. In addition, 544 beaver were lethally taken by WS in the State. WS employed body-gripping traps to lethally take 123 beaver and 421 beaver were live-captured in suitcase traps and euthanized by gunshot. In FY 2004, WS unintentionally caught two common loons (*Gavia immer*), four raccoons (*Procyon lotor*), one river otter (*Lontra canadensis*), and two unidentified turtles. The turtles were released from the traps unharmed. WS breached 444 beaver dams with hand tools to lower the water level where impounded water was flooding roads and installed 20 pond levelers to maintain water levels at those sites below a level where flooding was occurring.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2005

WS continued to provide both technical assistance and direct management activities in FY 2005 as described in the EA. Technical assistance provides those interested with information and recommendations on preventing wildlife damage and effective methods for resolving damage legally available. This information can then be employed by those persons experiencing wildlife damage to effectively resolve that damage without WS' direct involvement. In FY 2005, WS conducted 23 technical assistance projects involving beaver damage management in the State. WS received 474 requests for assistance to alleviate beaver damage in FY 2005. WS live-captured and relocated 56 beaver and used lethal methods to take 508 beaver in Maine during FY 2005. No non-target species were captured during WS' beaver damage management activities in FY 2005. WS breached 428 beaver dams with hand tools to lower the water level where impounded water was flooding roads. In FY 2005, WS did not receive a request to install pond levelers.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2006

WS continued to provide technical assistance and direct management activities in FY 2006 to those persons requesting assistance. WS conducted 12 technical assistance projects involving beaver in FY 2006. WS continued to receive requests for direct operational assistance in FY 2006 to resolve damage caused by beaver in Maine. Beaver damage occurred primarily to roads and bridges from flooding caused by beaver dams impounding water. WS received 617 requests for assistance to manage beaver damage in Maine during FY 2006. WS live-captured and relocated 465 beaver and used lethal methods to take 588 beaver in Maine during FY 2006. No non-target species were captured during WS' beaver damage management activities in FY 2006. To alleviate flooding by water impounded by beaver dams, WS employed hand tools to breached 365 beaver dams to lower water levels. In FY 2006, WS did not receive requests to install pond levelers.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2007

WS continued to provide both technical assistance and direct management activities in FY 2007 as described in the EA. In FY 2007, the WS program in Maine conducted two technical assistance projects involving beaver. WS also continued to employ direct operational damage management activities in which WS was directly involved with employing methods to alleviate damage caused by beaver at the request of the cooperator. WS responded to 351 requests for direct assistance to alleviate beaver damage in the State during FY 2007. Using suitcase traps at locations where beaver were causing damage, WS live-captured and relocated 245 beaver in the State to alleviate damage. In addition, WS lethally removed 476 beaver in FY 2007. WS primarily used firearms to lethally take beaver during FY 2007. WS breached 159 beaver dams with hand tools to lower the water level where impounded water was flooding roads. During WS' beaver damage management activities conducted in FY 2007, no non-targets were lethally taken or live-captured.

Summary of WS' Beaver Damage Management Activities in Maine during FY 2008

WS continued to assist those cooperators requesting assistance with damage caused by beaver in Maine during FY 2008. Those requesting assistance reported damages to roads, property from flooding caused by beaver impounding water through dam building, and threats to human safety. WS provided both technical assistance and direct management activities in FY 2008 as described in the EA.

WS continued to employ direct operational damage management activities in which WS was directly involved with employing methods to alleviate damage caused by beaver at the request of a cooperator. WS employed those methods available for preventing and resolving damage caused by beaver at 621 sites during FY 2008. To resolve requests for assistance to prevent or alleviate damage, WS live-captured 283 beaver using suitcase traps and lethally removed 668 beaver during FY 2008 in Maine. WS also breached 22 beaver dams with hand tools to lower the water level where impounded water was flooding roads. In FY 2008, WS unintentionally live-captured and released unharmed one great blue heron during beaver damage management activities in the State.

IX. ISSUES ANALYZED IN DETAIL

Issues are concerns of the public and/or professional community raised regarding potential environmental problems that might occur from a proposed action. Such issues must be considered in the NEPA decision-making process. Issues relating to the reduction of wildlife damage were raised during the scoping process for WS' programmatic FEIS (USDA 1997) and were considered in the preparation of the EA. Issues related to managing damage associated with beaver in Maine were developed by WS in consultation with the USFWS, the MDIFW, the Maine Department of Agriculture, the Maine Department of Forestry, the Maine Department of Environmental Protection, and the United States Army Corps of Engineers. The pre-decisional EA and Decision were also made available to the public for review and comment to identify additional issues.

The EA fully describes the issues identified during the scoping process for WS' programmatic FEIS and during the development of the EA. The following issues were identified as important to the scope of the analysis (40 CFR 1508.25):

Issue 1 - Effects on Wildlife populations

A common issue when addressing damage caused by wildlife are the potential impacts of management actions on the population of target and non-target species. Methods used to resolve damage can involve

altering the behavior of target species and may require the use of lethal methods when appropriate. Under the proposed action, WS provided technical and direct damage assistance using methods described in the EA in an integrated approach in which all or a combination of methods may be employed to resolve a request for assistance (USDA 2001).

Of primary concern is the magnitude of take on a species' population from the use of lethal methods. Lethal methods are employed to remove a beaver or those beaver responsible for causing damage and only after requests for such assistance are received by WS. The use of lethal methods would therefore result in local reductions of the beaver population in the immediate area where damage or threats were occurring. The number of target species removed from the population using lethal methods under the proposed action would be dependent on the number of requests for assistance received, the number of individuals involved with the associated damage or threat, and the efficacy of methods employed.

The analysis for magnitude of impact generally follows the process described in Chapter 4 of WS' programmatic FEIS (USDA 1997). Magnitude is described in WS' programmatic FEIS as "...a measure of the number of animals killed in relation to their abundance." Magnitude may be determined either quantitatively or qualitatively. Quantitative determinations are based on population estimates, allowable harvest levels, and actual harvest data. Qualitative determinations are based on population trends and harvest data when available. Generally, WS only conducts damage management involving species whose population densities are high and only after they have caused damage.

The issue of non-target species effects, including effects on threatened and endangered species arises from the use of non-lethal and lethal methods identified in the alternatives. The use of non-lethal and lethal methods has the potential to inadvertently disperse, capture, or kill non-target wildlife. WS' minimization measures and SOPs are designed to reduce the effects of damage management activities on non-target species' populations. To reduce the risks of adverse affects to non-target wildlife, WS selects damage management methods that are as target-selective as possible or applies such methods in ways that reduces the likelihood of capturing non-target species. Before initiating management activities, WS also selects locations which are extensively used by the target species and employs baits or lures which are preferred by those species. Despite WS' best efforts to minimize non-target take during program activities, the potential for adverse affects to non-targets exists when applying both non-lethal and lethal methods to manage damage or reduce threats to safety.

Beaver Population Impact Analysis

As shown in Table 1, the highest annual take of beaver by WS occurred in FY 2008 when 668 beaver were taken. Since FY 2001, WS has lethally removed a total of 3,068 beaver in Maine to alleviate damage associated with flooding, human health and safety, and damage to trees. In addition, WS relocated 4,685 beaver to suitable habitat identified by the MDIFW with landowner permission.

Beaver can be found statewide in Maine wherever suitable habitat exists. However, the current population of beaver in Maine is currently unknown (J. DePue, MDIFW, pers. comm. 2009). The EA estimated the statewide beaver population at a minimum of 53,200 beaver in Maine (USDA 2001). The MDIFW, with management authority over beaver, currently allows beaver to be harvested in the State during a regulated season with no limit on the number of beaver that can be harvested (MDIFW 2008). As shown in Table 2, an estimated 78,113 beaver have been harvested during the regulated trapping season in Maine since 2001. When compared to the harvest take during the regulated season, WS' take has not exceeded 9.5% of the estimated annual harvest of beaver in the State and has averaged 3.8% from 2001 through 2008.

Table 1 - Beaver lethally taken by method in Maine from FY 2001 through FY 2008 by WS.

Fiscal Year	Live-Trap ^a	Body Gripping	Cable Restraint	Foothold Trap	Shooting	TOTAL
2001	8	37	0	0	0	45
2002	9	44	0	0	0	53
2003	104	78	0	0	4	186
2004	421	123	0	0	0	544
2005	361	145	0	0	2	508
2006	407	129	4	0	48	588
2007	101	40	0	0	335	476
2008	596	72	0	0	0	668

^aBeaver taken using live-traps were euthanized by gunshot.

If populations of beaver have remained relatively stable at a minimum of 53,200 beaver in Maine based on the best available information provided in the EA, WS' highest level of annual take that occurred in FY 2008 would represent 1.3% of the estimated population. The highest level of total take of beaver in the State occurred during the 2007 season, when an estimated 13,111 beaver were taken during the regulated season in the State and taken by WS for damage management purposes. With an estimated 13,111 beaver taken in 2007 and a stable beaver population, the overall take of beaver would represent 24.6% of the estimated minimum population in the State based on the best available information in the EA. WS' take of beaver in the State has not exceeded 9.5% of the statewide harvest of beaver and has averaged 3.8% of the overall beaver take since 2001. Based on the proportion of the overall take of beaver in the State occurring by WS, WS' take has not limited the ability to harvest beaver during the regulated trapping season for beaver in the State.

MDIFW has not conducted a beaver assessment since 1986. There is no reliable population estimate of beaver in the State. Current harvest rates appear to be sustainable but there is no population index to measure harvest rates against (W. Jakubas, MDIFW, pers. comm. 2009). When compared to the sustainable harvest data of beaver to the overall harvest of beaver taken in the State, the magnitude of WS' annual take has been low. WS' activities did not adversely affect beaver populations in Maine based on the limited number of beaver taken by WS, the unlimited take allowed by the MDIFW, and the estimated sustainability index by MDIFW, WS' activities would not adversely affect beaver population in the State.

Table 2 – Estimated beaver harvest in Maine compared to WS' take of beaver from 2001 to 2008.

Year	Harvest ^{a,b}	WS' Take ^c	Total Take	WS % Take
2001	9,803	45	9,848	0.46%
2002	11,757	53	11,810	0.45%
2003	7,809	186	7,995	2.3%
2004	8,222	544	8,766	6.2%
2005	10,436	508	10,944	4.6%
2006	11,094	588	11,682	5.0%
2007	12,635	476	13,111	3.6%
2008	6,357	668	7,025	9.5%
Total	78,113	3,068	81,181	3.8%

^aHarvest data reported by harvest season

^bWithin 10 days of the close of the harvest season, all trappers must report the number of furs, hides, or pelts that have been taken during the regulated season. The number of furbearers harvested annually is based on the number of pelts reported to the MDIFW.

^cWS' take is reported by FY

WS' lethal take of beaver was within the estimated level of lethal take analyzed in the EA. WS' damage

management activities were site specific, and although local populations of beaver may have been reduced, there were no probable adverse impacts on statewide populations of those species from WS' activities. Program activities and their potential impact on target species have not changed from those analyzed in the EA. The effects of beaver damage management activities on this issue are expected to remain insignificant.

Non-target Species Analyses

The issue of non-target species effects arises from the use of non-lethal and lethal methods identified in the alternatives. The use of non-lethal and lethal methods has the potential to inadvertently disperse, capture, or kill non-target wildlife. WS' minimization measures and SOPs are designed to reduce the effects of damage management activities on non-target species' populations. To reduce the risks of adverse affects to non-target wildlife, WS selects damage management methods that are as target-selective as possible or applies such methods in ways that reduces the likelihood of capturing non-target species. Before initiating management activities, WS also selects locations which are extensively used by the target species and employs baits or lures which are preferred by those species. Despite WS' best efforts to minimize non-target take during program activities, the potential for adverse affects to non-targets exists when applying both non-lethal and lethal methods to manage damage or reduce threats to safety. WS' unintentional live-capture and lethal take of non-targets from FY 2001 through FY 2008 are shown in Table 3. Those non-target species lethally taken were captured primarily in body-gripping traps. Those non-targets captured alive and subsequently released unharmed were primarily captured in suitcase traps.

Table 3 – WS' non-target take by species in Maine during FY 2001 through FY 2008.

Species	Fiscal Year								Total
	2001	2002	2003	2004	2005	2006	2007	2008	
Common Loon	0	0	0	2	0	0	0	0	2
Dabbling Duck^a	0	1 ^b	0	0	0	0	0	0	1
Great Blue Heron	0	1 ^b	0	0	0	0	0	1 ^b	2
Raccoon	1 ^b	0	0	4	0	0	0	0	5
River Otter	0	0	0	1	0	0	0	0	1
Fisher	0	1 ^b	0	0	0	0	0	0	1
Turtle^c	0	0	0	2 ^b	0	0	0	0	2

^aThe species of dabbling duck is unknown.

^bSpecies were live-captured and released unharmed.

^cThe species of turtle is unknown.

As shown in Table 3, no non-target wildlife were live-captured or taken by WS during beaver damage management activities in FY 2003, FY 2005, FY 2006, and FY 2007. During FY 2001, one raccoon was live-captured and released unharmed during WS' activities to alleviate beaver damage. In FY 2002, WS live-captured and released one dabbling duck, one fisher, and one great blue heron during beaver damage management activities. In FY 2004, two common loons, four raccoons, and one river otter were lethally taken by WS during activities to alleviate damage. In addition, two turtles were live-captured in FY 2004 and released unharmed during beaver damage management activities. During FY 2008, one great blue heron was live-captured and released unharmed.

WS' live-capture and subsequent release of one fisher in FY 2002 did not adversely affect fisher populations in the State since the fisher was released unharmed by WS. A total of four raccoons and one river otter have been lethally taken by WS during beaver damage management activities since FY 2001 in the State. Raccoons and river otter can be found statewide in Maine wherever suitable habitat exists. The

MDIFW allows raccoons to be taken during regulated harvest seasons each year with no limit on the number of raccoons that can be taken during those open seasons. Raccoon harvest data is not gathered in the State by the MDIFW. Based on the unlimited take of raccoons allowed by the MDIFW and the limited take of raccoons by WS during beaver damage management activities in FY 2004, WS' lethal take of four raccoons in FY 2004 did not adversely affect raccoon populations in the State. Similarly, WS' unintentional take of raccoons did not limit the ability to harvest raccoons during the hunting and trapping seasons in the State. Based on the limited take by WS since FY 2001, the unintentional take of raccoons during activities to alleviate damage is expected to continue to be of a low magnitude.

The MDIFW allows river otters to be taken during annual regulated seasons. The current otter population in Maine is unknown. In 2004, 931 otter were harvested statewide during the regulated trapping season (MDIFW 2008). WS' take of one otter in FY 2004 when compared to the total known take of otter in 2004 was 0.1% of the statewide harvest. The magnitude of WS' unintentional take of one river otter during beaver damage management activities is low when compared to the statewide harvest. Based on the unlimited take allowed by the MDIFW during the open otter harvest seasons and the low magnitude of WS' take when compared to the total known take of otter, WS' unintentional take of one otter has not adversely affected river otter populations in the State. WS' take of one otter has not limited the ability of those interested to harvest otter during the open trapping seasons in the State based on the low magnitude of WS' take. Based on the limited take that has occurred by WS since FY 2001, the unintentional take of river otter by WS during beaver damage management activities is expected to continue to be of a low magnitude when compared to the statewide harvest of otter.

Since FY 2001, WS' beaver damage management activities have unintentionally captured two turtles in suitcase traps, all of which were released. The populations of individual turtle species are unknown. Since turtles were live-captured and released unharmed, WS' beaver damage management activities did not adversely affect populations of turtles in the State. Based on the limited capture of turtles by WS since FY 2001, WS' beaver damage management activities are expected to have no adverse effects on turtle populations in the State.

In addition to those non-target mammal species discussed, WS' beaver damage management activities have also unintentionally captured three bird species since FY 2001. One dabbling duck was live captured in a suitcase trap in FY 2002 and released unharmed. In FY 2004, two common loons were lethally taken by body-gripping traps. No loons were taken prior to FY 2004 and no loons have been lethally taken since FY 2004 by WS. WS' take of loons was within permitted take levels allowed by the United States Fish and Wildlife Service (USFWS) pursuant to the Migratory Bird Treaty Act through the issuance of depredation permits. The number of loons observed during the breeding season in Maine has increased annually at an estimated rate of 2.1% since 1966 (Sauer et al. 2008). Based on the limited lethal take by WS, the take only occurring in FY 2004, and the permitting of the take by the USFWS, WS' unintentional take of two loons in FY 2004 did not adversely affect loon populations in the State.

Since FY 2001, two great blue herons have been unintentionally captured by WS in Maine during beaver damage management activities. Of those two herons captured unintentionally, one was live-captured in FY 2002 and one was live-captured in FY 2008. In both cases, the herons were released unharmed by WS. Since no lethal take of herons occurred during beaver damage management activities and both herons were released unharmed, the live-capture and release of those two herons did not adversely affect the population of herons in the State.

While every precaution is taken to safeguard against taking non-targets during operational use of methods and techniques for resolving damage and reducing threats caused by wildlife, the use of such methods can result in the incidental take of unintended species. Those occurrences are minimal and should not affect

the overall populations of any species. WS' take of non-target species during activities to reduce damage caused by beaver is expected to be extremely low. WS will continue to monitor annually the take of non-target species to ensure program activities used in beaver damage management do not adversely impact non-targets. WS' activities are not likely to adversely affect the viability of any wildlife populations from damage management activities.

Threatened and Endangered Species (T&E Species)

No threatened or endangered (T&E) species have been taken or adversely affected by WS' actions since the completion of the EA. A review of T&E species listed by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NMFS) showed that additional listings of T&E species in Maine have occurred since the completion of the EA. Appendix A contains a list of T&E species currently listed in the State by the USFWS and the NMFS.

Since the completion of the EA, the Canada lynx (*Lynx canadensis*) has been listed as threatened in the State. After a review of WS' beaver damage management activities conducted in Maine, the USFWS concurred with WS' determination that methods and activities conducted to alleviate and prevent beaver damage in the State would not adversely affect lynx populations in the State (M. McCollough, USFWS, letter to R. Dyer, WS, December 12, 2006, M. McCollough, USFWS, pers. comm. 2009).

In addition, the Atlantic salmon (*Salmo salar*) has been listed in the State as an endangered species since the completion of the EA. WS has initiated consultation with the USFWS regarding beaver damage management in Maine to address the listing of salmon in the State (W. Mahaney, USFWS, pers. comm. 2007). During discussions, two concerns emerged: 1) lethally taking an Atlantic salmon in a body-gripping trap; and 2) sediment load caused by the breaching of beaver dams. No fish of any species have been taken by WS in Maine in body-gripping traps, and the likelihood of such an incident is remote, especially in areas outside of critical habitat. Beaver dams can limit fish passage to spawning habitat, especially in years with low water levels (National Marine Fisheries Service and U.S. Fish and Wildlife Service 2005).

In 2000, the USFWS and the NMFS issued a final rule listing the Gulf of Maine distinct population segment of Atlantic salmon as endangered in the State (65 FR 69459). The final rule listed the core area of remnant populations of Atlantic salmon in the Dennys, East Machias, Machias, Pleasant, Narraguagus, Ducktrap, and Sheepscot rivers and Cove Brook (65 FR 69459). In 2008, the USFWS and the NMFS issued a 12-month finding on a petition to list the Kennebec River salmon population as endangered in the State, which included salmon populations in the Kennebec River, Penobscot River, and the Androscoggin River (73 FR 51415). Also in 2008, the NMFS issued a proposed rule to designate critical habitat for the Gulf of Maine distinct population segment of Atlantic salmon in Maine (73 FR 51747). The proposed critical habitat designation divides the Gulf of Maine distinct population segment into three salmon habitat recover units (SHRU) which are the Downeast Coastal SHRU, the Penobscot Bay SHRU, and the Marrymeeting Bay (SHRU) which includes only those specific areas currently considered as occupied by salmon (73 FR 51747).

To address concerns raised by the USFWS, WS will not employ body-gripping traps in those rivers where Atlantic salmon are known to currently occupy to avoid the unintentional capture of salmon. WS will only use live-capture (suitcase) traps in those rivers in Maine where Atlantic salmon are known to occur in the Gulf of Maine distinct population segment. WS will continue to maintain regular contact with the USFWS and/or the NMFS to ensure WS is aware of river systems where salmon are known to occupy. To prevent downstream sedimentation of critical habitat, WS will not breach or remove beaver dams in areas designated as critical habitat by the USFWS and/or the NMFS once a final rule is published.

Program activities and methods have not changed from those analyzed in the EA. Thus, WS' determination of not likely to adversely affect T&E species in Maine is still valid and appropriate for the proposed action for those species addressed in the 1992 Biological Opinion issued by the U.S. Fish and Wildlife Service based on WS' programmatic activities⁷. WS has reviewed the current list of T&E species listed in Maine. After review of beaver damage management activities conducted in Maine, WS has determined that activities conducted to reduce beaver damage in the State will have no effect on those species that were not addressed in the Biological Opinion issued on WS' programmatic activities, except for the Canada lynx and Atlantic salmon which were addressed previously.

Issue 2 – Humaneness of Control Techniques

As discussed in the EA, humaneness, in part, appears to be a person's perception of harm or pain inflicted on an animal. People may perceive the humaneness of an action differently. The challenge in coping with this issue is how to achieve the least amount of animal suffering within the constraints imposed by current technology.

Some individuals believe any use of lethal methods to resolve damage associated with wildlife is inhumane because the resulting fate is the death of the animal. Others believe that certain lethal methods can lead to a humane death. Others believe most non-lethal methods of capturing wildlife to be humane because the animal is generally unharmed and alive. Still others believe that any disruption in the behavior of wildlife is inhumane. With the multitude of attitudes on the meaning of humaneness, the analyses must consider the most effective way to address damage and threats caused by wildlife in a humane manner. WS is challenged with conducting activities and employing methods that are perceived to be humane while assisting those persons requesting assistance to manage damage and threats associated with wildlife. The goal of WS is to use methods as humanely as possible to effectively resolve requests for assistance to reduce damage and threats to human safety. WS continues to evaluate methods and activities to minimize the potential pain and suffering of those methods addressed when attempting to resolve requests for assistance.

As mentioned previously, some methods have been stereotyped as "humane" or "inhumane". However, many "humane" methods can be inhumane if not used appropriately. For example, a cage trap is generally considered by most members of the public as "humane" since an animal is live-captured. Yet, without proper care, live-captured wildlife in a cage trap can be treated inhumanely if not attended to appropriately.

Therefore, WS' mission is to effectively address requests for assistance using methods in the most humane way possible that minimizes the stress and pain of the animal. WS' personnel are experienced and professional in their use of management methods. When employing methods to resolve damage to resources or threats to human safety, methods are applied as humanely as possible. Methods used in beaver damage management activities in Maine since the completion of the EA and their potential impacts on humaneness and animal welfare have not changed from those analyzed in the EA. No new methods were identified in this report that would alter the analysis contained in the EA on the issue of method humaneness. Therefore, the analyses of the humaneness of methods used by WS to manage damage and threats caused by beaver have not changed from those analyzed in the EA.

Issue 3 - Effects of Beaver Dam Removal on Wetland Wildlife Habitat

The issue of adverse impacts to wetlands arises from use of rakes to breach beaver dams which could result

⁷ The 1992 Biological Opinion issued by the U.S. Fish and Wildlife Service can be found in WS' programmatic Final Environmental Impact Statement (USDA 1997).

in the loss of wetland habitat. The breaching and/or removal of beaver dams releases impounded water and alleviates damage associated with flooding upstream of the beaver dam and returns streams, channels, culverts, and irrigation canals to their natural flow regime.

Most dams that WS breaches are created as a result of recent beaver activity. WS receives most requests for assistance soon after damage is discovered. These sites do not possess wetland characteristics or the same wildlife habitat values as wetlands. Since these sites are new or at least relatively recently occurring and may be present for only a brief period of time it, WS' damage management activities are not negatively affecting the statewide status of wetlands and does not adversely affect wetlands because sites are generally being returned to an original condition. Dams are removed in accordance with provisions of Section 404 of the Clean Water Act. From FY 2001 through FY 2008, WS' breached a total of 2,405 beaver dams using hand rakes to restore water flow through culverts caused by beaver dams impounding water.

Program activities and their potential impacts on wetlands have not changed from those analyzed in the EA. No new methods, circumstances, or regulations have been implemented since the writing of the EA. The EA concluded that WS' beaver dam removal/breaching activities should have minimal impact on wetlands (USDA 2001). The impacts of WS' beaver damage management activities on wetlands are expected to remain insignificant.

The EA concluded that the effects of WS' beaver damage management activities when conducted within the scope analyzed would have no adverse impact on human safety or pet safety. WS' implementation of the proposed action from FY 2001 through FY 2008 did not result in any adverse impacts to human or pet safety. The methods available for use to manage damage caused by beaver in Maine remain as addressed in the EA. Therefore, the potential impacts of program activities on human health and safety have not changed from those analyzed in the EA. Impacts of the program on this issue are expected to remain insignificant.

Issue 4 – Effects of Beaver Management on Public Safety

The EA concluded that the effects of WS' beaver damage management activities when conducted within the scope analyzed would have no adverse impact on human safety. WS' implementation of the proposed action from FY 2001 through FY 2008 did not result in any adverse impacts to human safety. The methods available for use to manage damage caused by beaver in Maine remain as addressed in the EA. Therefore, the potential impacts of program activities on human health and safety have not changed from those analyzed in the EA. Impacts of the program on this issue are expected to remain insignificant.

Issue 5 - Esthetics and Conflicts

The EA concluded the effects on aesthetics would be variable, depending on the damage situation, stakeholder's values towards wildlife, and their compassion for those who are experiencing damage from beaver. Overall, however, impacts would be insignificant. The ability to view and enjoy the aesthetic value of beaver at a particular site would be eliminated if the animals were removed. However, viewing opportunities exist throughout the State in areas that are not being negatively impacted by the presence of beaver. The opportunity to view beaver is available if a person makes the effort to visit sites outside of the damage management area.

WS only conducts beaver damage management at the request of the affected home/property owner or resource manager. Upon receiving a request for assistance, WS addresses issues/concerns and explanations are given for all damage management activities. Management actions are carried out in a humane and professional manner. Program activities and their potential impacts on aesthetics have not

changed from those analyzed in the EA. The effects of WS' beaver damage management activities on this issue are expected to remain insignificant.

X. ISSUES NOT CONSIDERED IN DETAIL

WS has reviewed the issues not considered in detail as described in the EA and has determined that the analysis provided in the EA has not changed and is still appropriate. Effects on those issues continue to be insignificant.

XI. ALTERNATIVES ANALYZED IN DETAIL

The following six alternatives were developed in response to the issues identified in the EA and through public involvement:

- **Alternative 1** – Continue the Current Federal Beaver Damage Management Program/Integrated Damage Management (Proposed Action/No Action)
- **Alternative 2** – No Federal Action
- **Alternative 3** – Technical Assistance Only
- **Alternative 4** - Non-lethal Control Only
- **Alternative 5** – Non-lethal Control Methods Employed Prior to the Use of Lethal Control
- **Alternative 6** - Lethal Control Only

The EA contains a detailed description and discussion of the alternatives and the effects of the alternatives on the issues identified. WS has reviewed the alternatives analyzed and determined the analyses in the EA are still appropriate for those alternatives.

XII. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

The following alternatives were considered but not analyzed in detail:

- Compensation for Beaver Damage Losses
- Eradication and Long-term Population Suppression
- Reproduction Control
- Biological Control

A complete evaluation and discussion of the alternatives not considered in detail can be found in the EA along with the rationale. WS has reviewed the alternatives analyzed but not in detail and determined the analyses in the EA are still appropriate for those alternatives considered.

XIII. ANALYSIS

WS has reviewed the potential environmental impacts and the scope of analysis contained in the EA. The EA and the associated Decision/FONSI determined that activities conducted pursuant to and within the scope of analyses would not have significant impacts on the quality of the human environment. After review of the EA, the associated Decision/FONSI, and information contained in this summary report, WS has determined that the environmental impacts on the quality of the human environment from those activities conducted pursuant to the EA and its Decision/FONSI will continue to be insignificant and that no substantive changes in the analyses are necessary.

WS' beaver damage management activities in Maine, based on the information found within this report,

fall within the scope of analysis in the EA. No substantive changes have occurred in activities conducted or methods used since implementing the EA decision during the reporting period. Program activities have not changed from those described and analyzed in the EA. The EA discusses program procedures, protection measures, and mitigations that the WS program implements during direct control activities to provide an assurance of quality and consideration for environmental impacts.

XIV. DECISION AND RATIONALE

I have carefully reviewed the EA, the comments received during the public involvement process, the 2001 Decision/FONSI, and the information provided in this summary and new Decision document. I find the proposed program to be environmentally acceptable, addressing the issues and needs while balancing the environmental concerns of management agencies, landowners, advocacy groups, and the public. The analyses in the EA adequately addresses the identified issues which reasonably confirm that no significant impact, individually or cumulatively, to wildlife populations or the quality of the human environment are likely to occur from the proposed action, nor does the proposed action constitute a major federal action that would warrant the development of an EIS. Therefore, the analysis in the EA remains valid and does not warrant the completion of an EIS.

Based on the EA, the issues identified are best addressed by continuing Alternative 1 (Proposed Action/No Action) and applying the associated mitigation measures discussed in the EA. Alternative 1 successfully addresses (1) beaver damage management using a combination of the most effective methods and does not adversely impact the environment, property, and/or non-target species, including T&E species; (2) it offers the greatest chance at maximizing effectiveness and benefits to resource owners and managers while minimizing cumulative impacts on the quality of the human environment that might result from the program's effect on target and non-target species' populations; (3) it presents the greatest chance of maximizing net benefits while minimizing adverse impacts to public health and safety; and (4) it offers a balanced approach to the issues of humaneness and aesthetics when all facets of those issues are considered. Further analysis would be triggered if changes occur that broaden the scope of beaver damage management activities, that affect the natural or human environment, or from the issuance of new environmental regulations.

The rationale for my decision is based on several considerations. This decision takes into account public comments, social/political and economic concerns, public health and safety, the best available science, and program activities conducted since the selected alternative was implemented. The foremost considerations are that: 1) beaver damage management will only be conducted by WS at the request of landowners/managers, 2) management actions are consistent with applicable laws, regulations, policies and orders, and 3) no adverse impacts to the environment were identified in the analysis. As a part of this new Decision, the WS program in Maine will continue to provide effective and practical technical assistance and direct management techniques that reduce damage.


The WS program in Maine will implement the proposed action in compliance with all applicable standard operating procedures and minimization measures described in the EA. If no substantive issues or alternatives are identified after publication of a legal notice making the EA, the 2001 Decision/FONSI, and this Decision available to the public for review and comment, this new Decision will take effect at the close of the public notification period. New issues or alternatives raised after publication of public notices will be fully considered to determine whether the EA and this Decision should be revisited and, if appropriate, revised, or if a Notice of Intent to prepare an EIS should be issued.

FINDING OF NO SIGNIFICANT IMPACT

The analysis in the EA, the 2001 Decision/FONSI, and this summary report indicates that there will not be a significant impact, individually or cumulatively, on the quality of the human environment as a result of this proposed action. I agree with this conclusion and therefore find that an EIS need not be prepared.

This determination is based on the following factors:

1. Beaver damage management as conducted by WS in Maine is not regional or national in scope.
2. The proposed action would pose minimal risk to public health and safety. Risks to the public from WS' methods were determined to be low in a formal risk assessment (USDA 1997).
3. There are no unique characteristics such as park lands, prime farm lands, wetlands, wild and scenic areas, or ecologically critical areas that would be significantly affected. Built-in mitigation measures that are part of WS' standard operating procedures and adherence to laws and regulations will further ensure that WS' activities do not harm the environment.
4. The effects on the quality of the human environment are not highly controversial. Although there is some opposition to wildlife damage management, this action is not highly controversial in terms of size, nature, or effect.
5. Based on the analysis documented in the EA and the accompanying administrative file, the effects of the proposed damage management program on the human environment would not be significant. The effects of the proposed activities are not highly uncertain and do not involve unique or unknown risks.
6. The proposed action would not establish a precedent for any future action with significant effects.
7. No significant cumulative effects were identified through this assessment. The number of beaver killed by WS, when added to the total known take of beaver, would fall within allowable harvest levels supported by the MDIFW. The EA discussed potential cumulative effects of WS' activities on target and non-target species populations and concluded that such impacts were not significant for this or other anticipated actions to be implemented or planned within the State.
8. The proposed activities would not affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, nor would they likely cause any loss or destruction of significant scientific, cultural, or historical resources.
9. WS has determined that the proposed program would not adversely affect any federal or state listed threatened or endangered species that were addressed in the Biological Opinion issued by the USFWS on WS' programmatic activities. WS' has reviewed the list of T&E species and determined that beaver damage management activities would have no effect on those species not addressed in the Biological Opinion, except for the Canada lynx and the Atlantic salmon. After consultation with the USFWS, WS has determined that beaver damage management activities will not adversely affect Canada lynx and Atlantic salmon.
10. The proposed action would be in compliance with all federal, state, and local laws, regulations, policies, and orders.


Charles S. Brown, Director-Eastern Region
USDA/APHIS/WS
Raleigh, North Carolina

5/19/09
Date

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Appendix A
Federal Threatened and Endangered Species in Maine

Animal species listed in this state and that occur in this state

<u>Status</u>	<u>Species</u>
T	Lynx, Canada lower 48 States DPS (<i>Lynx canadensis</i>)
T	Plover, piping except Great Lakes watershed (<i>Charadrius melodus</i>)
E	Puma (=cougar), eastern (<i>Puma (=Felis) concolor couguar</i>)
E	Salmon, Atlantic Gulf of Maine Atlantic Salmon DPS (<i>Salmo salar</i>)
E	Sea turtle, leatherback (<i>Dermochelys coriacea</i>)
E	Sturgeon, shortnose (<i>Acipenser brevirostrum</i>)
E	Tern, roseate northeast U.S. nesting pop. (<i>Sterna dougallii dougallii</i>)
E	Whale, finback (<i>Balaenoptera physalus</i>)
E	Whale, humpback (<i>Megaptera novaeangliae</i>)
E	Whale, right (<i>Balaena glacialis (incl. australis)</i>)

Animal species listed in this state that do not occur in this state

<u>Status</u>	<u>Species</u>
E	Beetle, American burying (<i>Nicrophorus americanus</i>)
E	Curlew, Eskimo (<i>Numenius borealis</i>)
E	Wolf, gray Lower 48 States, except where delisted and where EXPN. Mexico. (<i>Canis lupus</i>)

Plant species listed in this state and that occur in this state

<u>Status</u>	<u>Species</u>
E	Lousewort, Furbish (<i>Pedicularis furbishiae</i>)
T	Orchid, eastern prairie fringed (<i>Platanthera leucophaea</i>)
T	Pogonia, small whorled (<i>Isotria medeoloides</i>)